

*In the claims:*

1-16. (Cancelled)

17. (Currently Amended) A method of extracting multiple tissue samples from a subject, comprising

inserting into a volume of a tissue an instrument comprising a sharp distal end and a plurality of controllable tissue sampling devices each of said devices being located in a different position in an array along a longitudinal axis of a housing and a plurality of isolated chambers, each of said sampling devices comprising a corresponding one of said isolated chambers, each of said sampling devices comprising an isolated chamber; the volume of each of said isolated chambers being less than 1.2 cubic millimeters;

contacting actuating at least one of said a sampling devices ~~with~~ by a deployment signal, said signal being selected from the group consisting of an electrical, optical, pneumatic, hydraulic, RF- transmitted, inductive, magnetic, thermal or sonic signal, said signal causing an opening of said chamber;

removing tissue samples from anatomical locations at varying depths within said tissue;  
and

sealing said chamber.

18. (Original) The method of claim 17, wherein said sampling devices are deployed simultaneously.

19. (Original) The method of claim 17, wherein each of said sampling devices is deployed temporally.

20. (Currently Amended) A method of extracting multiple tissue samples from a subject, the method comprising:

inserting into a volume of a tissue an instrument comprising a sharp distal end, and a plurality of controllable tissue sampling devices each of said devices being located in a different position in an array along a longitudinal axis of a housing, and a plurality of isolated chambers

~~each of said sampling devices comprising a corresponding one of said isolated chambers, each of said sampling devices comprising an isolated chamber~~; the volume of said isolated chamber being less than 1.2 ~~milliliters- cubic millimeters~~;

heating the plurality of sampling devices, heating causing actuation of a mechanical portion of the plurality of sampling devices, such that a mechanical portion of the sampling devices collects samples from varying depths within said tissue and retains the samples;

depositing the samples into a local said isolated chambers; and

removing the instrument from the subject.

21. (Currently Amended) The method of claim 20, wherein heating comprises passing electrical current through a portion of the ~~extracting~~ sampling device.

22. (Original) The method of claim 20, wherein collecting and retaining the sample comprises applying a differential pressure to ~~the local~~ at least one of said isolated chambers and sucking the sample into the local isolated chamber.

23. (Original) The method of claim 20, further comprising ejecting the samples by pressurizing the chamber.

24. (Withdrawn) The method of claim 20, wherein collecting and retaining the sample comprises scooping the sample from the subject by pivoting a scoop from a rest position after heating the scoop.

25. (Withdrawn) The method of claim 20, wherein collecting and retaining the sample comprises expanding a volume of a fluid in a chamber and causing a set of jaws to deploy from the chamber.

26. (Original) The method of claim 20, further comprising imaging a location of the sample fiberoptically.

27. (Currently Amended) The method of claim 4 20, wherein the volume of each of said isolated chambers is selected from the group consisting of 0.005, 0.01, 0.05, 0.1, 0.5, and 0.75 cubic millimeters.
28. (Currently Amended) The method of claim 17, wherein the volume of each of said isolated chambers is selected from the group consisting of 0.005, 0.01, 0.05, 0.1, 0.5, and 0.75 cubic millimeters.
29. (Currently Amended) The method of claim 20, wherein said instrument comprises greater than 50 of said isolated chambers.
30. (Currently Amended) The method of claim 17, wherein said instrument comprises greater than 50 of said isolated chambers.
31. (Previously Presented) The method of claim 17, wherein said tissue sampling devices remove samples at varying depths in said tissue to map variation in a given line or direction.
32. (Previously Presented) The method of claim 20, wherein said tissue sampling devices remove samples at varying depths in said tissue to map variation in a given line or direction.
33. (Currently Amended) The method of claim 17, wherein said tissue comprises a diseased area.
34. (Currently Amended) The method of claim 20, wherein said tissue comprises a diseased area.
35. (Currently Amended) The method of claim 17, wherein said tissue comprises a tumor.
36. (Currently Amended) The method of claim 20, wherein said tissue comprises a tumor.
37. (Previously Presented). The method of claim 17, wherein multiple linear samples are taken to evaluate the extent of change of tissue characteristics.

38. (Previously Presented) The method of claim 20, wherein multiple linear samples are taken to evaluate the extent of change of tissue characteristics.

39. (Previously Presented) The method of claim 35, wherein multiple linear samples are taken to evaluate the extent of tumor growth.

40. (Previously Presented) The method of claim 36, wherein multiple linear samples are taken to evaluate the extent of tumor growth.